CLAIMS:

1. Apparatus for displaying images represented by image-representative input signals, comprising:

rows of micro light sources for producing sheets of light;

a diffractive panel, in the path of said sheets of light, which receives said input signals and diffracts said sheets of light to obtain diffracted light imparted with image-representative information; and

a Schleiren optical system for processing said diffracted light to produce images represented by said image-representative input signals.

2. Apparatus as defined by claim 1, wherein said input signals comprise video signals.

3. Apparatus as defined by claim 1, wherein said micro light sources comprise microlasers.

4. Apparatus as defined by claim 1, wherein said Schleiren optical system includes a Schleiren lens, output Schleiren bars, and a projection lens.

5. Apparatus as defined by claim 1, wherein said diffractive panel comprises a transmissive liquid crystal panel.

6. Apparatus for receiving frames of input video signals representative of color images, and for projecting the color images, comprising:

a plurality of linear arrays of micro light sources of respective colors;

means for coupling lines of the color input signals to respective linear arrays of said micro light sources; and

means for vertically scanning light from said linear arrays to form an image.

7. Apparatus as defined by claim 6, wherein said micro light sources comprise microlasers.

8. Apparatus as defined by claim 6, wherein said input signals comprise video signals.

9. Apparatus as defined by claim 6, wherein said means for vertically scanning comprises a scanning mirror.

10. Apparatus as defined by claim 6, wherein said plurality of linear arrays of micro light sources comprise a row of red light sources, a row of green light sources, and a row of blue light sources.

11. Apparatus as defined by claim 9, wherein said plurality of linear arrays of micro light sources comprise a row of red light sources, a row of green light sources, and a row of blue light sources.

12. Apparatus as defined by claim 10, wherein said means for coupling lines of color input signals to respective linear arrays of said micro light sources includes a plurality of serial to parallel registers.

13. Apparatus as defined by claim 10, wherein said means for coupling lines of color input signals to respective linear arrays of said micro light sources is synchronized with the scan of said means for vertically scanning light from said linear arrays.

14. Apparatus as defined by claim 10, wherein said means for coupling lines of color input signals to respective linear arrays of said micro light sources includes delay means for delaying the signals input to said arrays to combine color component lines at said scanning mirror.

15. Apparatus for displaying images represented by image-representative input signals, comprising:

a two-dimensional array of microlasers for producing a light beam;

a polarizing panel, in the path of said light beam, which receives said input signals and selectively polarizes said light beam in accordance with the input signal to obtain an output light beam; and

means for processing said output light beam to produce images represented by said image-representative input signals.

16. Apparatus as defined by claim 15, wherein said two-dimensional array of microlasers includes pluralities of microlasers of different colors, and further comprising means for sequentially exciting said respective pluralities of microlasers of different colors.

17. Apparatus as defined by claim 16 wherein said input signals include color component signals, and further comprising means for applying said color component signals to said polarizing panel in coordination with the sequential excitation of said pluralities of microlasers of different colors.

18. Apparatus as defined by claim 15, wherein said means for processing said output light beam includes a polarization analyzer and a projection lens.

19. A method for producing electronic image-representative signals representing a spatially filtered version of an image on film, comprising the steps of:

providing a micro light source and illuminating the film with said source;

imaging the film illumination on an electronic image sensor; and

providing an aperture filter in conjunction with said imaging.

20. The method as defined by claim 19, wherein said step of providing a micro light source comprises providing a microlaser.

21. A method for recoding on film, a spatially filtered version of an image represented by image-representative signals, comprising the steps of:

providing a micro light source and illuminating, with said light source, an electro-optical panel which receives said image-representative signals, to produce an

imaging the panel illumination on film; and

providing an aperture filter in conjunction with said imaging.

22. The method as defined by claim 21, wherein said step of providing a micro light source comprises providing a microlaser.

23. A method for displaying images represented by image-representative input signals, comprising the steps of

providing rows of light sources for producing sheets of light;

providing a modulator, in the path of said sheets of light, which receives said input signals and diffracts said sheets of light to obtain diffracted light imparted with image-representative information; and

providing a Schleiren optical system for processing said diffracted light to produce images represented by said image-representative input signals.

24. The method as defined by claim 23, wherein said step of providing rows of light sources comprises providing rows of micro light sources.

25. The method as defined by claim 23, wherein said step of providing rows of light sources comprises providing rows of microlasers.

26. The method as defined by claim 23, wherein said step of providing a modulator comprises providing a diffraction panel.

27. A method for receiving frames of input video signals representative of color images, and for projecting the color images, comprising the steps of:

providing a plurality of linear arrays of micro light sources of respective colors;

coupling lines of the color input signals to respective linear arrays of said micro light sources; and

vertically scanning light from said linear arrays to form an image.

28. The method as defined by claim 27, wherein said step of providing a plurality of linear arrays of micro light sources comprises providing a plurality of linear arrays of microlasers.

29. The method as defined by claim 27, wherein said step of vertically scanning comprises scanning with a mirror.

30. The method as defined by claim 27, wherein said step of providing a plurality of linear arrays of micro light sources comprises providing a row of red light sources, a row of green light sources, and a row of blue light sources.

31. The method as defined by claim 27, wherein said step of coupling lines of color input signals to respective linear arrays of said micro light sources is synchronized with the vertical scanning of light from said linear arrays.

32. The method as defined by claim 29, wherein said step of coupling lines of color input signals to respective linear arrays of said micro light sources includes delaying the signals input to said arrays to combine color component lines at said scanning mirror.

33. A method for displaying images represented by image-representative input signals, comprising the steps of:

providing a two-dimensional array of microlasers for producing a light beam;

providing a polarizing panel, in the path of said light beam, for receiving said input signals and selectively polarizing said light beam in accordance with the input signal to obtain an output light beam; and

processing said output light beam to produce images represented by said image-representative input signals.

34. The method as defined by claim 33, wherein said step of providing a two-dimensional array of microlasers includes providing pluralities of microlasers of different colors, and further comprising sequentially exciting said respective pluralities of microlasers of different colors.

35. The method as defined by claim 34, wherein said input signals include color component signals, and further comprising applying said color component signals to said polarizing panel in coordination with the sequential excitation of said pluralities of microlasers of different colors.